

REMARKS

Claims 1-16 are pending, with claims 1 and 10 being in independent form. No claims have been amended.

In the Office Action, claims 1-3, 8, and 10-12 have been rejected for anticipation by U.S. Patent No. 6,263,078 to McLaughlin et al. ("McLaughlin"), and claims 4-7 have been rejected for obviousness over McLaughlin. Claim 9 has been rejected for obviousness over a combination of McLaughlin and U.S. Patent No. 5,796,819 to Romesburg. Each of these rejections is respectively traversed.

Applicant claims a loudspeaker volume range control arrangement for a telephone having a loudspeaker and a microphone. The arrangement includes means for controlling the volume range of the loudspeaker in dependence on the estimated distance between the loudspeaker and the microphone of the telephone based on the signals of the loudspeaker and microphone of the telephone.

The distance between the microphone and the loudspeaker is estimated based on, for example, coefficients of an adaptive filter arrangement in the telephone or based on the ratio or difference between the energies of the loudspeaker signal and the microphone signal.

To support a rejection under 35 U.S.C. § 102, each and every feature of the claimed invention must be shown in a single prior art document. Moreover, to establish a prima facie case of obviousness, the cited documents must teach or suggest all of the claim limitations. As discussed below, independent claims 1 and 10 positively recite limitations that are not disclosed nor suggested in the cited documents and are therefore not anticipated by, nor obvious in view of the cited documents.

Independent claim 1 recites "means for controlling the volume range of the loudspeaker." As described in the specification at page 7, and in connection with Figures 3 and 4, the volume range of the loudspeaker is controllable. In particular, when the loudspeaker is mounted close to the microphone, the volume of the loudspeaker can be varied within a first range of volumes. When the loudspeaker is mounted further away from the microphone, the volume of the loudspeaker can be varied within a different range. Thus, the available volume range of the loudspeaker

can be controlled based on the estimated distance between the loudspeaker and the microphone. Independent method claim 10 also includes analogous features.

The Examiner contends that McLaughlin discloses "means for controlling the volume range (38) of the loudspeaker" (Action, page 2). Applicants disagree.

Block 38 is described in McLaughlin as a "volume compensator," however, as described at lines 37-39 in column 5 of McLaughlin, the purpose of the volume compensator is to cancel echoes in the outgoing signal that have been caused by sudden changes in the loudspeaker volume. Thus, the volume compensator is compensating for, i.e., reacting to, changes in volume. The volume compensator of McLaughlin clearly does not control the volume range of the loudspeaker, as defined by claim 1.

Further evidence of this deficiency is found in Figure 2 of McLaughlin. It is apparent to one of ordinary skill in this art from Figure 2 that the volume compensator 38 in McLaughlin does not affect the loudspeaker 26, or any of the other components leading to the loudspeaker, to thereby control, or even effect, the volume range of the loudspeaker as defined by claim 1. In contrast, only the signal in the microphone output path is affected.

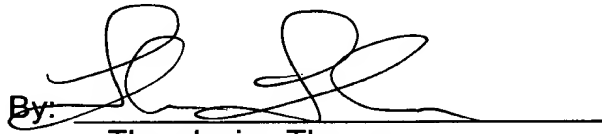
Moreover, Romesburg fails to cure this deficiency.

Accordingly, since the cited documents fail to disclose or suggest all of the claim limitations for at least the above reasons, the anticipation rejections of claims 1-3, 8, and 10-12 and the obviousness rejections of claims 4-7 and 9 should be withdrawn.

For the foregoing reasons, Applicants consider the application to be in condition for allowance and respectfully request notice thereof at an early date. The Examiner is encouraged to telephone the undersigned at the below-listed number if, in the Examiner's opinion, such a call would aid in the examination of this application.

Respectfully submitted,

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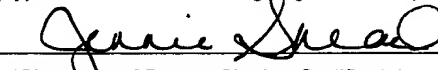
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Date: October 8, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addresses to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on October 8, 2003

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